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(54) **High dynamic range error rate monitor**

(57) There is provided an error rate monitor (10) incorporating a counter (30) which is incremented as errors are detected in a data stream passing through an interface unit (20) connected to the counter (30). The counter (30) is also simultaneously decremented at a rate proportional to an exponential of a value presently

stored in the counter (30). The monitor (10) thereby provides from the value stored in the counter (30) a measure of error rate in the data stream, the value substantially proportional to a logarithm of error rate in the data stream, thereby providing the monitor (10) with a relatively large error rate monitoring dynamic range.

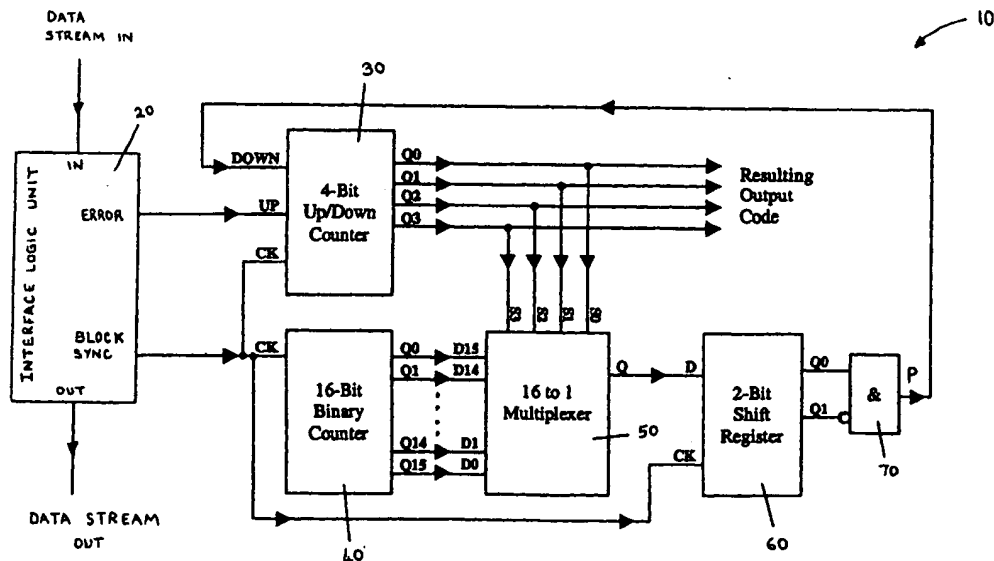


Fig. 1



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 00 30 9891

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A	* figure 5 *	6-8	
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A	KEREKES I ; ANIDO G ; BRADLOW H S ; EYERS T: "Dimensioning of leaky buckets to be used as monitors" ELECTRONICS LETTERS, vol. 29, 21 January 1993 (1993-01-21), pages 245-246, XP002271033 UK * the whole document *	1-11	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H04L
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 February 2004	Examiner Stolte, N
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82